

# 3D1 heavy chain variable region sequence

										30										60
ATG	GGT	TGG	AAC	TGT	ATC	ATC	TTC	TTT	CTG	GTT	ACA	ACA	GCT	ACA	GGT	GTG	CAC	TCC	CAG	
M	G	W	N	C	I	I	F	F	L	V	T	T	A	T	G	V	H	S	Q	
																				90
GTG	CAG	CTG	CAG	CAG	TCT	GGG	CCT	GAG	CTG	GTG	AGG	CCT	GGG	GAA	TCA	GTG	AAG	ATT	TCC	120
V	Q	L	Q	Q	S	G	P	E	L	V	R	P	G	E	S	V	K	I	S	
																				150
TGC	AAG	GGT	TCC	GGC	TAC	ACA	TTC	ACT	GAT	TAT	GCT	ATA	CAG	TGG	GTG	AAG	CAG	AGT	CAT	180
C	K	G	S	G	Y	T	F	T	<u>D</u>	<u>Y</u>	<u>A</u>	<u>I</u>	<u>Q</u>	W	V	K	Q	S	H	
																				210
GCA	AAG	AGT	CTA	GAG	TGG	ATT	GGA	GTT	ATT	AAT	ATT	TAC	TAT	GAT	AAT	ACA	AAC	TAC	AAC	240
A	K	S	L	E	W	I	G	<u>V</u>	<u>I</u>	<u>N</u>	<u>I</u>	<u>Y</u>	<u>Y</u>	<u>D</u>	<u>N</u>	<u>T</u>	<u>N</u>	<u>Y</u>	<u>N</u>	
																				270
CAG	AAG	TTT	AAG	GGC	AAG	GCC	ACA	ATG	ACT	GTA	GAC	AAA	TCC	TCC	AGC	ACA	GCC	TAT	ATG	300
<u>Q</u>	<u>K</u>	<u>F</u>	<u>K</u>	<u>G</u>	K	A	T	M	T	V	D	K	S	S	S	T	A	Y	M	
																				330
GAA	CTT	GCC	AGA	TTG	ACA	TCT	GAG	GAT	TCT	GCC	ATC	TAT	TAC	TGT	GCA	AGA	GCG	GCC	TGG	360
E	L	A	R	L	T	S	E	D	S	A	I	Y	Y	C	A	R	<u>A</u>	<u>A</u>	<u>W</u>	
																				390
TAT	ATG	GAC	TAC	TGG	GGT	CAA	GGA	ACC	TCA	GTC	ACC	GTC	TCC	TCA						
<u>Y</u>	<u>M</u>	<u>D</u>	<u>Y</u>	W	G	Q	G	T	S	V	T	V	S	S						

Figure 1 (A)

# 3D1 light chain variable region sequence

```

                                     30                                     60
ATG GAT TCA CAG GCC CAG GTT CTT ATA TTG CTG CTG CTA TGG GTA TCT GGT ACC TGT GGG
M   D   S   Q   A   Q   V   L   I   L   L   L   L   W   V   S   G   T   C   G

                                     90                                     120
GAC ATT GTG CTG TCA CAG TCT CCA TCC TCC CTG GCT GTG TCA GCA GGA GAG AAG GTC ACT
D   I   V   L   S   Q   S   P   S   S   L   A   V   S   A   G   E   K   V   T

                                     150                                     180
ATG AGC TGC AAA TCC AGT CAG AGT CTG CTC AAC AGT AGA ACC CGA GAG AAC TAC TTG GCT
M   S   C   K   S   S   Q   S   L   L   N   S   R   T   R   E   N   Y   L   A

                                     210                                     240
TGG TAC CAG CAG AAA CCA GGG CAG TCT CCT AAA CTG CTG ATC TAC TGG GCA TCC ACT AGG
W   Y   Q   Q   K   P   G   Q   S   P   K   L   L   I   Y   W   A   S   T   R

                                     270                                     300
GAA TCT GGG GTC CCT GAT CGC TTC ACA GGC AGT GGA TCT GGG ACA GAT TTC ACT CTC ACC
E   S   G   V   P   D   R   F   T   G   S   G   S   G   T   D   F   T   L   T

                                     330                                     360
ATC AGC AGT GTG CAG GCT GAA GAC CTG GCA GTT TAT TAC TGC ACG CAA TCT TAT AAT CTT
I   S   S   V   Q   A   E   D   L   A   V   Y   Y   C   T   Q   S   Y   N   L

                                     390
TAC ACG TTC GGA GGG GGG ACC AAG CTG GAA ATA AAA
Y   T   F   G   G   G   T   K   L   E   I   K

```

Figure 1 (B)

# Hu3D1 heavy chain variable region sequence

```

                                     30                                     60
ATG GGT TGG AAC TGT ATC ATC TTC TTT CTG GTT ACC ACA GCT ACA GGT GTG CAC TCC CAG
M  G  W  N  C  I  I  F  F  L  V  T  T  A  T  G  V  H  S  Q

                                     90                                     120
GTC CAG CTG GTG CAG TCT GGG GCT GAG GTG AAG AAG CCT GGG AGC TCA GTG AAG GTG TCC
V  Q  L  V  Q  S  G  A  E  V  K  K  P  G  S  S  V  K  V  S

                                     150                                     180
TGC AAA GCT TCC GGC TAC ACA TTC ACT GAT TAT GCT ATA CAG TGG GTG AGA CAG GCT CCT
C  K  A  S  G  Y  T  F  T  D  Y  A  I  Q  W  V  R  Q  A  P

                                     210                                     240
GGA CAG GGC CTC GAG TGG ATT GGA GTT ATT AAT ATT TAC TAT GAT AAT ACA AAC TAC AAC
G  Q  G  L  E  W  I  G  V  I  N  I  Y  Y  D  N  T  N  Y  N

                                     270                                     300
CAG AAG TTT AAG GGC AAG GCC ACA ATG ACT GTA GAC AAG TCG ACG AGC ACA GCC TAT ATG
Q  K  F  K  G  K  A  T  M  T  V  D  K  S  T  S  T  A  Y  M

                                     330                                     360
GAA CTT AGT TCT TTG AGA TCT GAG GAT ACG GCC GTT TAT TAC TGT GCA AGA GCG GCC TGG
E  L  S  S  L  R  S  E  D  T  A  V  Y  Y  C  A  R  A  A  W

                                     390
TAT ATG GAC TAC TGG GGT CAA GGT ACC CTT GTC ACC GTC TCC TCA
Y  M  D  Y  W  G  Q  G  T  L  V  T  V  S  S

```

Figure 2 (A)

# Hu3D1 light chain variable region sequence

										30											60
ATG	GAT	TCA	CAG	GCC	CAG	GTT	CTT	ATA	TTG	CTG	CTG	CTA	TGG	GTA	TCT	GGC	ACC	TGT	GGG		
M	D	S	Q	A	Q	V	L	I	L	L	L	L	W	V	S	G	T	C	G		
										90											120
GAC	ATT	GTG	CTG	ACA	CAG	TCT	CCA	GAT	TCC	CTG	GCT	GTA	AGC	TTA	GGA	GAG	AGG	GCC	ACT		
<u>D</u>	I	V	L	T	Q	S	P	D	S	L	A	V	S	L	G	E	R	A	T		
										150											180
ATT	AGC	TGC	AAA	TCC	AGT	CAG	AGT	CTG	CTC	AAC	AGT	AGA	ACC	CGA	GAG	AAC	TAC	TTG	GCT		
I	S	C	<u>K</u>	<u>S</u>	<u>S</u>	<u>Q</u>	<u>S</u>	<u>L</u>	<u>L</u>	<u>N</u>	<u>S</u>	<u>R</u>	<u>T</u>	<u>R</u>	<u>E</u>	<u>N</u>	<u>Y</u>	<u>L</u>	<u>A</u>		
										210											240
TGG	TAC	CAG	CAG	AAA	CCA	GGG	CAG	CCT	CCT	AAA	CTG	CTG	ATC	TAC	TGG	GCA	TCC	ACT	AGG		
W	Y	Q	Q	K	P	G	Q	P	P	K	L	L	I	Y	<u>W</u>	<u>A</u>	<u>S</u>	<u>T</u>	<u>R</u>		
										270											300
GAA	TCT	GGG	GTC	CCT	GAT	CGC	TTC	AGT	GGC	AGT	GGA	TCT	GGG	ACA	GAT	TTC	ACT	CTC	ACC		
<u>E</u>	<u>S</u>	G	V	P	D	R	F	S	G	S	G	S	G	T	D	F	T	L	T		
										330											360
ATC	AGC	AGT	CTG	CAG	GCT	GAA	GAC	GTG	GCA	GTT	TAT	TAC	TGC	ACG	CAA	TCT	TAT	AAT	CTT		
I	S	S	L	Q	A	E	D	V	A	V	Y	Y	C	<u>T</u>	<u>Q</u>	<u>S</u>	<u>Y</u>	<u>N</u>	<u>L</u>		
										390											
TAC	ACG	TTC	GGA	CAG	GGG	ACC	AAG	GTG	GAA	ATA	AAA										
<u>Y</u>	<u>T</u>	F	G	Q	G	T	K	V	E	I	K										

Figure 2 (B)

### Competition Binding Assay of Anti-B7.2 mAbs

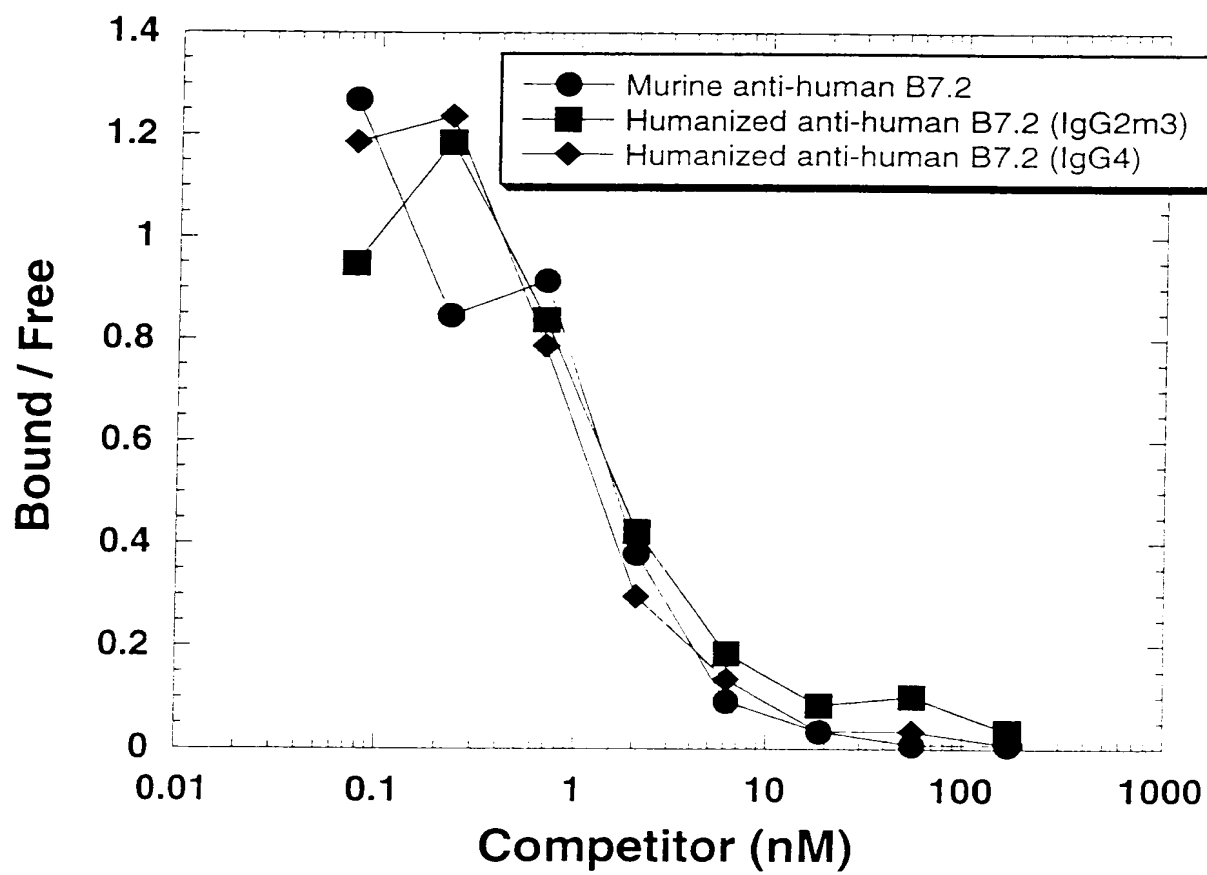


Figure 3

## Direct Binding Assay of Anti-B7.2 mAbs

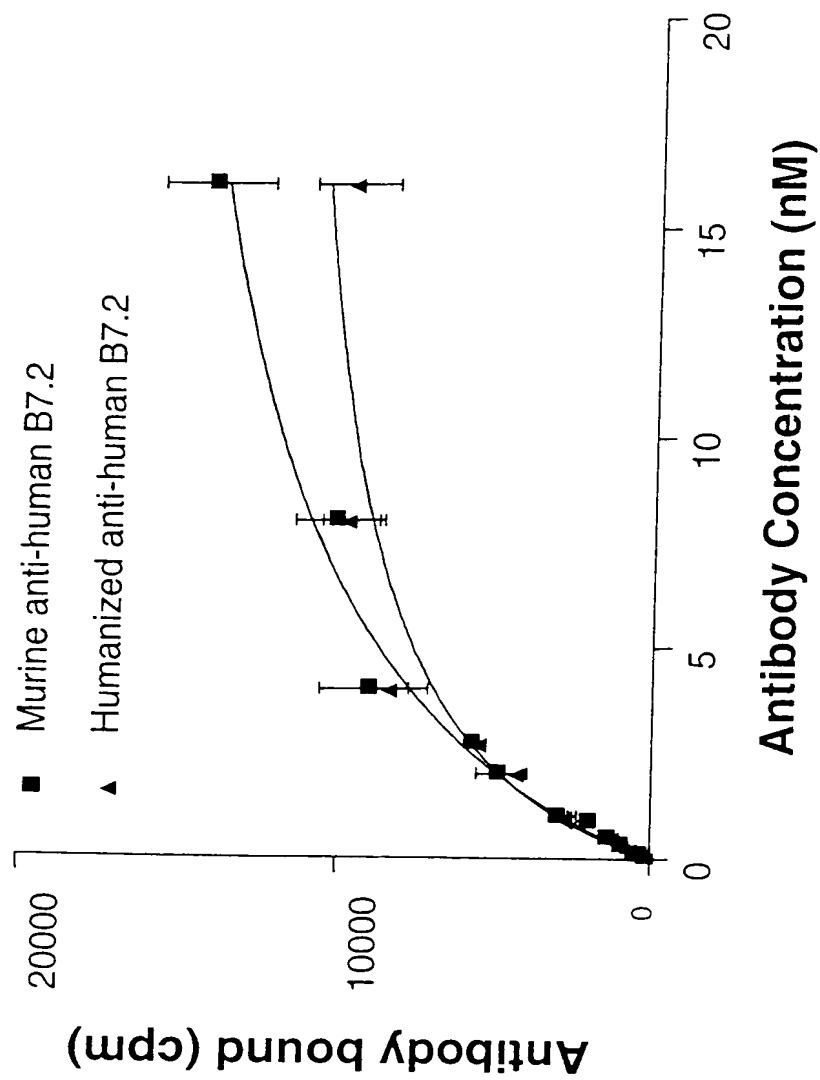


Figure 4

# Inhibition of CD28<sup>+</sup> T Cell Proliferation by Anti-B7.2 mAbs

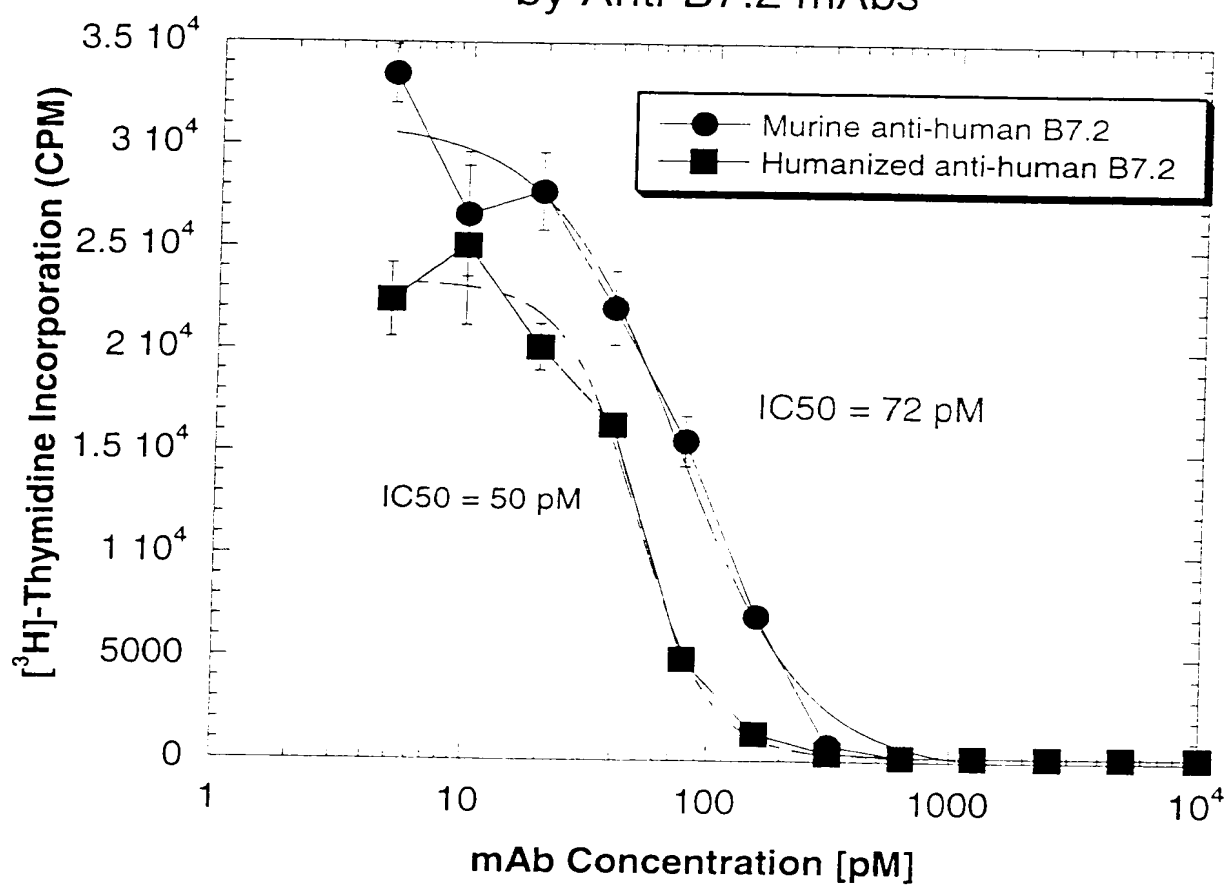


Figure 5

# Inhibition of a Mixed Lymphocyte Reaction by Anti-B7 Antibodies and CTLA4Ig

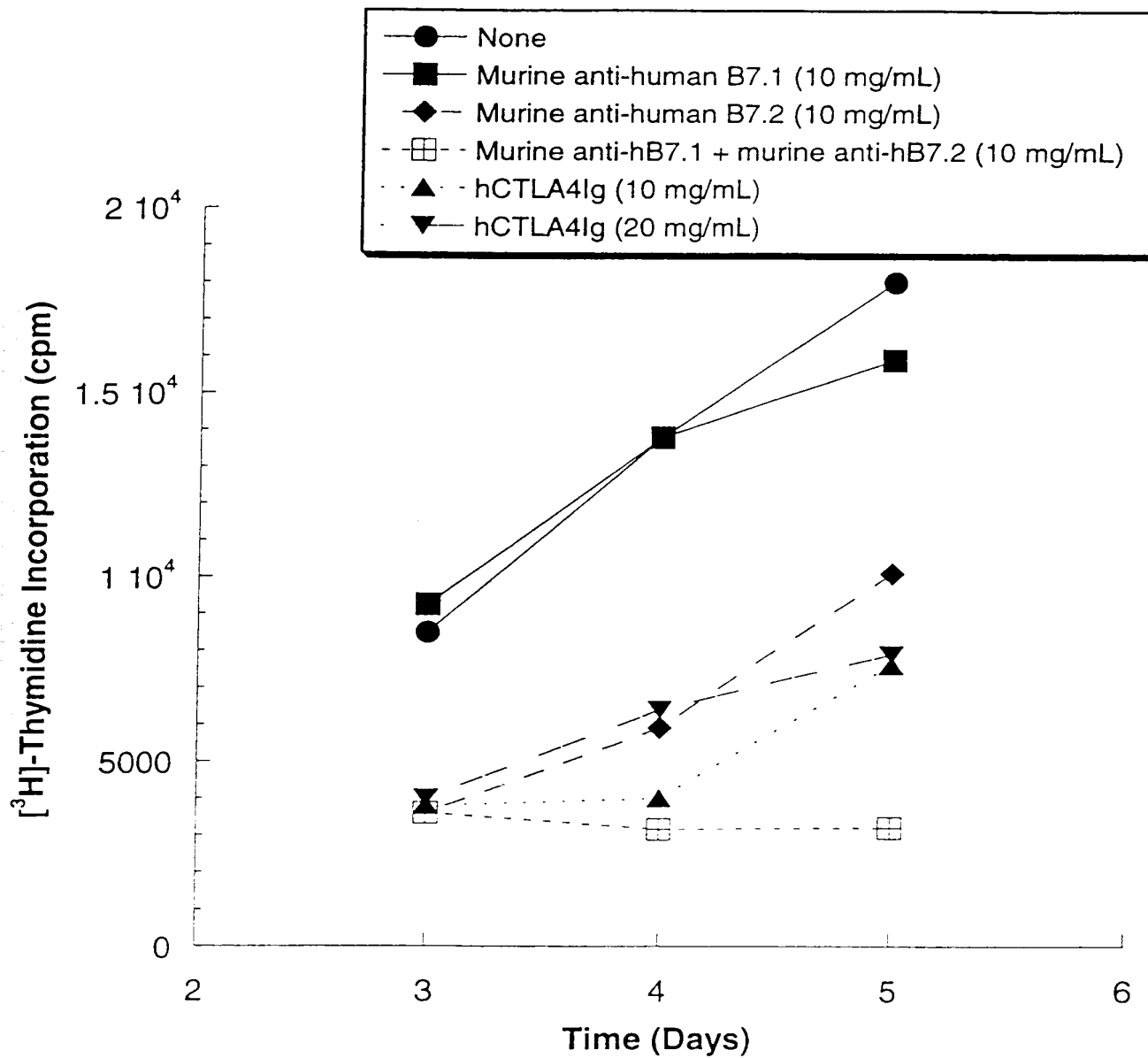


Figure 6



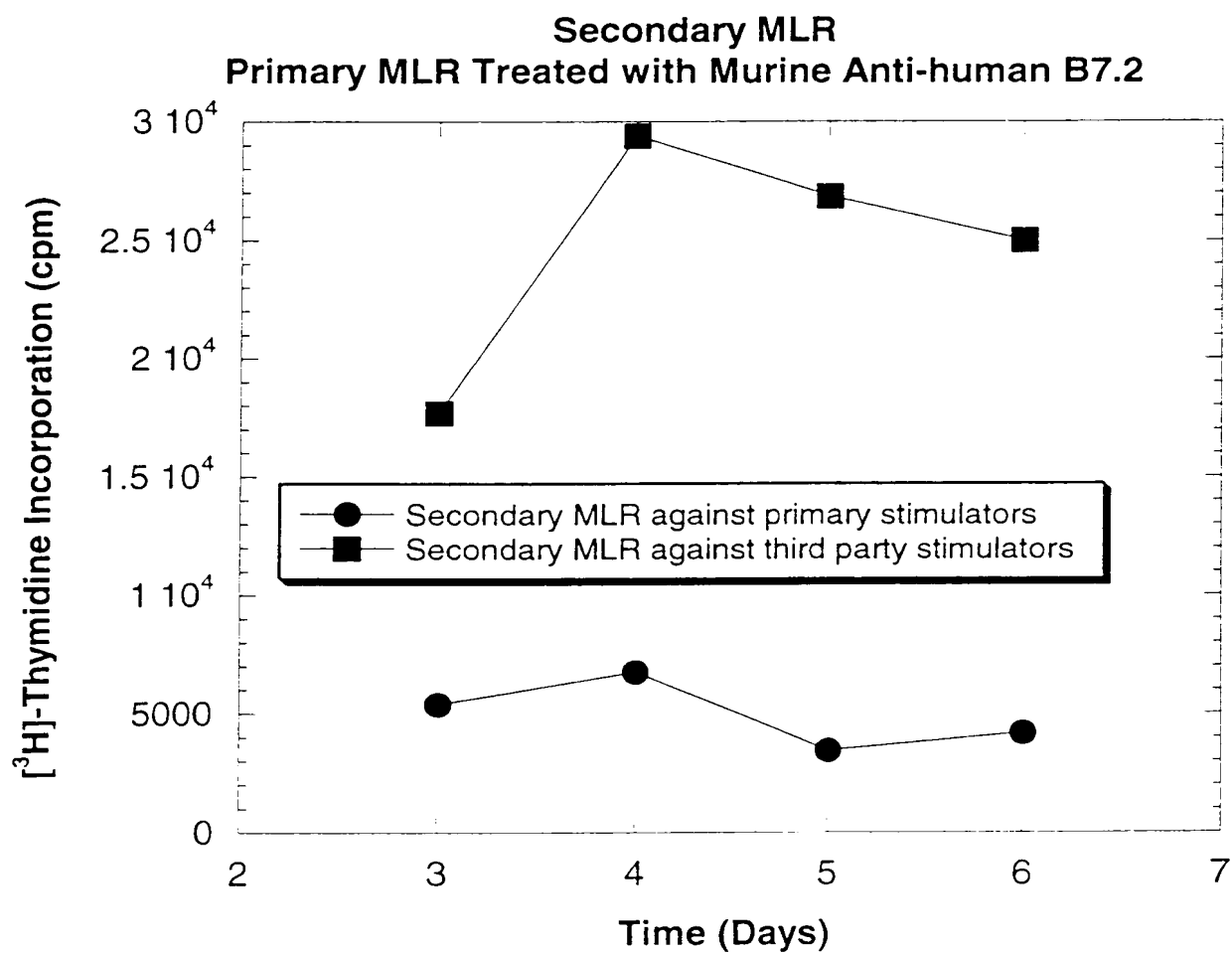


Figure 7

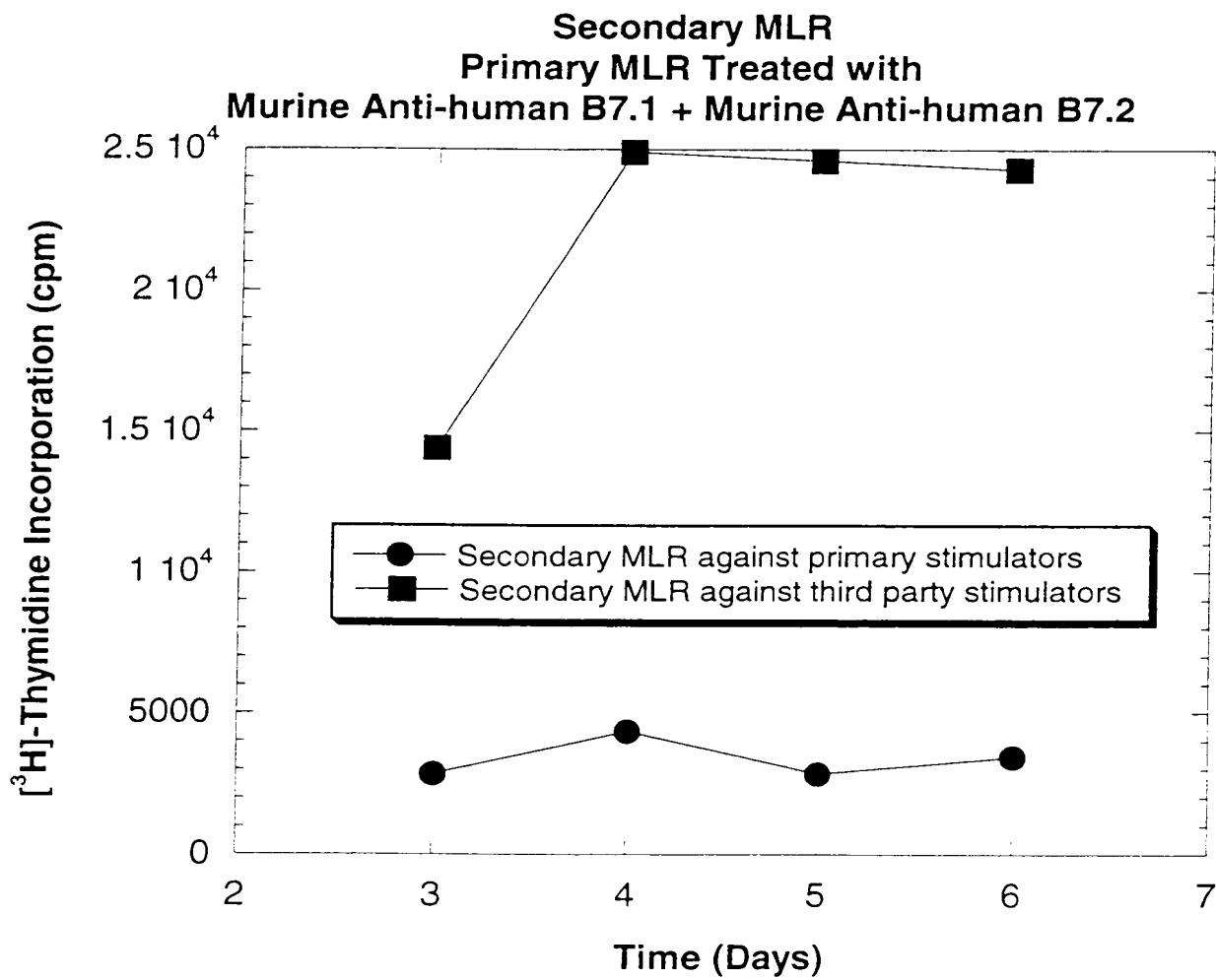


Figure 8

# Antibody Response to Tetanus Immunization During Costimulation Blockade with Humanized Anti-B7.1 and Anti-B7.2

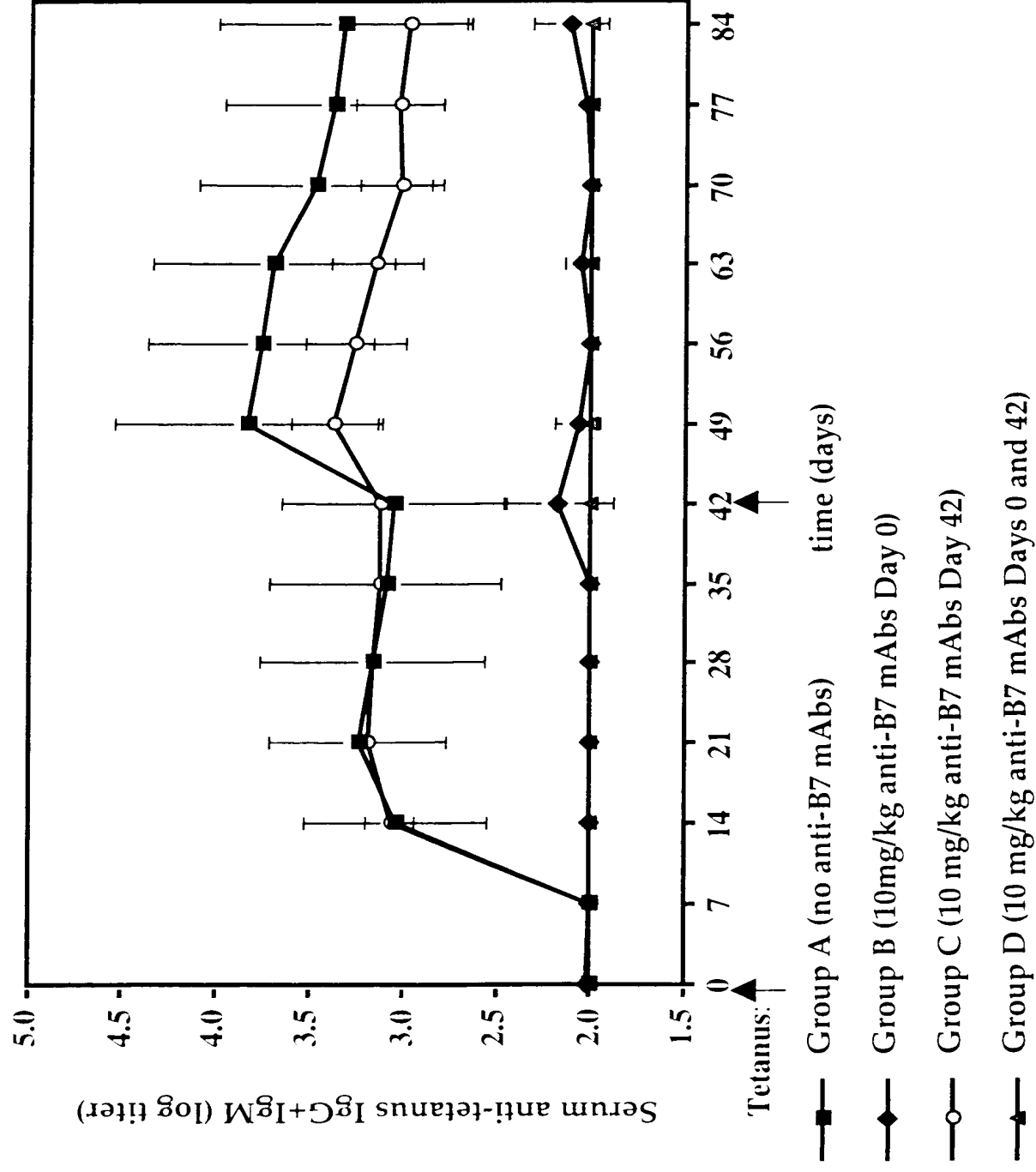


Figure 9

## Serum Concentration of Humanized Anti-B7-2 in cynomolgus Monkeys

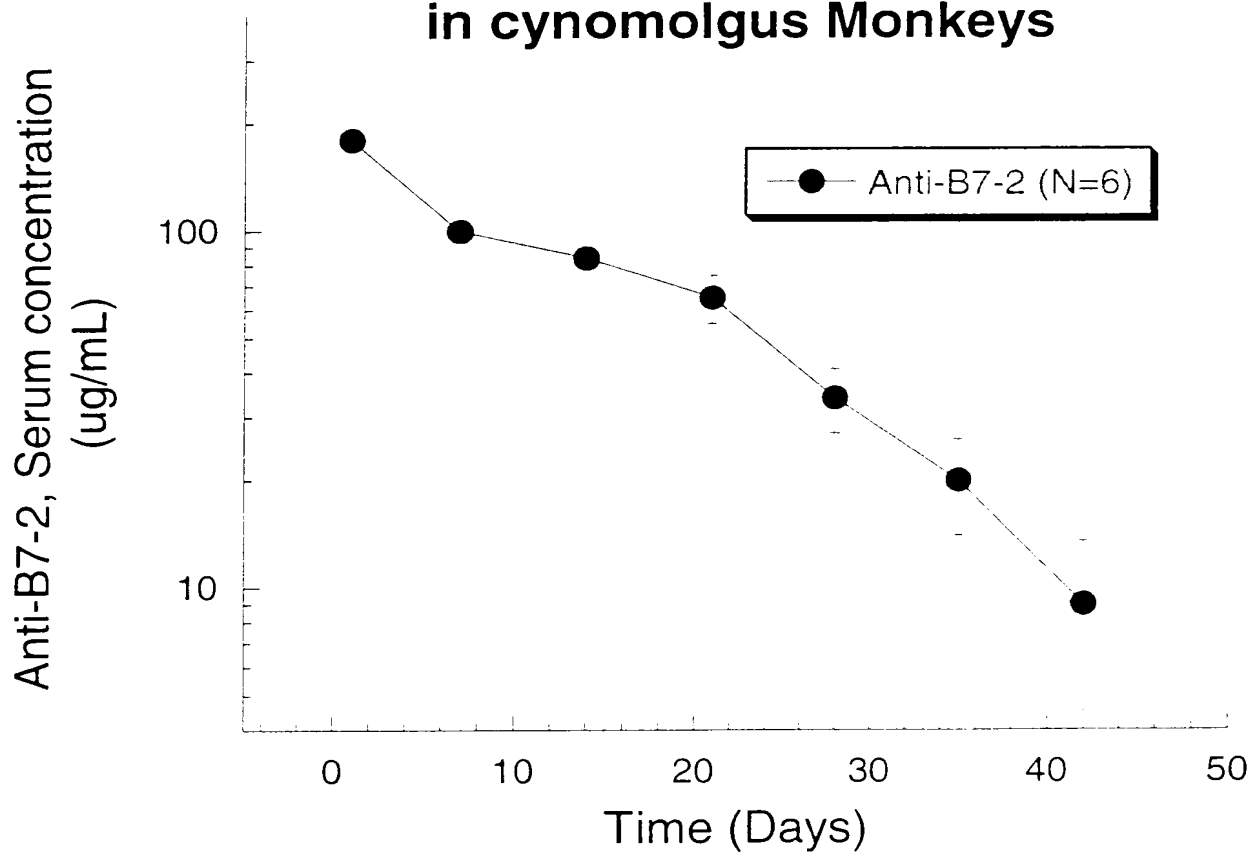


Figure 10